

NONPROVISIONAL APPLICATION FOR LETTERS PATENT
UNITED STATES OF AMERICA

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Be it known that I, **KAREN HOGAN**, residing at **1452 Crown Terrace, Marietta, Georgia 30062**, a citizen of the United States, have invented certain new and useful improvements in an

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APPARATUS AND METHOD FOR PREPARING FOOD

of which the following is a specification.

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APPARATUS AND METHOD FOR PREPARING FOOD

TECHNICAL FIELD

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The present invention relates generally to food preparatory devices, and more specifically to an apparatus and method for selectively or contemporaneously tenderizing and marinating meats or other selected food items. In view
10 of conventional meat tenderizing devices and methods, the present invention is particularly advantageous for its ability to preclude the splatter of raw meat juices during the tenderizing process, and thus reduce the proliferation of harmful bacteria commonly associated therewith.

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BACKGROUND OF THE INVENTION

Often times, tough meats must be "softened" or tenderized to facilitate the preparation, cooking and
20 subsequent consumption of same. Tenderizing meat essentially entails utilizing mechanical, chemical or marinating processes to break down the meat's muscle fibers and connective tissue, and/or to denature or "unwind" the

long protein strands thereof, thereby yielding a more malleable and tender meat.

In particular, a popular method of mechanically
5 tenderizing meat involves striking or pounding the meat via
a heavy tenderizing mallet having a series of pointed
protrusions extending therefrom for forcefully piercing the
meat, thereby breaking down the meat's muscle fiber with
each strike of the mallet thereto. Similar mechanical
10 utensils are available in the form of metal or wooden bats,
flat-faced mallets, or other suitable implements.
Additionally, those without such mallets, or as alternative
thereto, may often utilize a large metal pan to strike the
meat, thereby effectuating a wider, more evenly distributed
15 tenderizing impact.

Other mechanical tenderizing devices incorporate
hinged upper and lower metal plates, each such plate having
a series of tenderizing teeth protruding therefrom. Such
20 devices function specifically as meat tenderizing presses,
wherein the repeated, hinged movement or lowering of the
upper plate toward the lower plate imparts a force onto the

meat seated thereon, and thus, pierces the meat via the tenderizing teeth.

Although such mechanical methods and devices are
5 effective in tenderizing the meat, the structural and functional disadvantages associated with such devices renders implementation of same problematic and messy, and presents potential health hazards.

10 More specifically, the exposed, unenclosed nature of such mechanical meat tenderizing devices, and the associated forceful striking or pounding of the meat by same, often results in the leakage and/or splattering of raw meat juices and/or particulate onto the food
15 preparatory surface, the user, and/or surrounding food items. Such juices or particles are typically laden with harmful bacteria or other microorganisms that have a tendency to proliferate and, once introduced into the human digestive system, cause a number of health related problems
20 symptomatic of food poisoning, such as loss of appetite, nausea, vomiting and diarrhea. Although such splatters and spills may be cleaned, it is often difficult to completely

sanitize and eliminate all bacteria from the contaminated surfaces and/or food items.

Moreover, although some may place the meat between
5 pieces of paper or plastic wrap in an attempt "capture"
splatter of meat juices or particles during the tenderizing
process, such a method often leads to the paper or plastic
wrap sticking to the mallet or the meat, tearing as a
result of the pointed protrusions of the mallet piercing
10 therethrough, and/or bunching of the wrap, thereby
requiring replacement or repositioning of same. In
addition thereto, because of the relatively porous or
breathable nature of paper and plastic wraps, utilization
of such a method does not guard against bacterial
15 proliferation.

Additionally, if the meat is placed upon a porous
surface, such as a wooden cutting board, during the
tenderizing process, washing the surface may reduce the
20 number of harmful bacteria thereon, but will not entirely
eliminate all the bacteria. As such, subsequent use of the
porous surface for handling or preparing other food items
will result in the contamination of such food items with

the vestigial bacteria, thereby presenting the potential health hazards described above.

Another method of tenderizing and flavoring meat
5 involves the application of an acid-based liquid marinade to the meat for purposes of denaturing or "unwinding" the long protein strands thereof. Such marinades are often applied to the meat within a sealable plastic bag, wherein the marinated meat is permitted to "sit" for a period to
10 facilitate the tenderizing and flavoring process. However, many such marinades are ineffective in penetrating and infusing the meat and are, therefore, ineffective in denaturing the proteins. As such, those utilizing a marinade to tenderize raw meat are often forced to inject
15 the marinade into the meat to facilitate the marinade-tenderizing process from therewithin.

Of course, attempting to utilize conventional mechanical tenderizing devices in conjunction with a liquid
20 marinade to forcefully infuse the marinade into the meat, and therefore tenderize and flavor same, would inherently result in many of the above-referenced deficiencies; to wit, excessive splatter of the marinade, raw meat juices

and meat particulate; thereby, presenting the above-referenced health risks.

Therefore, it is readily apparent that there is a need
5 for an apparatus and method for selectively or
contemporaneously tenderizing and marinating meats or other
desired food items without the proliferation of harmful
bacteria resulting from the leakage and/or splatter of raw
meat juices and particulate, as is commonly experienced
10 with the utilization and implementation of conventional
meat tenderizing devices and methods.

BRIEF SUMMARY OF THE INVENTION

15 Briefly described, in a preferred embodiment, the
present invention overcomes the above-mentioned
disadvantages and meets the recognized need for such a
device by providing an apparatus and method for selectively
or contemporaneously tenderizing and marinating meats or
20 other desired food items, wherein implementation of the
present apparatus and method entails application of a
sealable apparatus having a mechanical tenderizing assembly
incorporated therein. Such device and method, accordingly,

permits the sequestration and containment of raw meat juices, meat particulate, and/or marinade therewithin during the tenderizing process, and further, thereby eliminates leakage and/or splatter of same, while reducing
5 or eliminating associated bacterial proliferation and contamination of surrounding surfaces or food items.

According to its major aspects and broadly stated, the present invention in its preferred form is an apparatus and
10 method for selectively or contemporaneously tenderizing and marinating meats or other desired food items, having, in general, a sealable bag and mechanical tenderizing surfaces.

15 More specifically, the present invention is an apparatus and method for selectively or contemporaneously tenderizing and marinating meats or other desired food items, wherein the present invention is preferably in the form of a reusable, pliable, non-porous, reversible or
20 invertible, sealable plastic or rubber bag having a plurality of pointed protrusions or tenderizing teeth integrally formed with the inner surfaces thereof. Implementation of the present method simply requires that

the meat or other food item be placed within the bag, excess air forced out therefrom via hand-pressure or the like if required, and the subsequent closure or sealing of the bag via an incorporated rib-and-groove mechanism, ties, 5 or other suitable closure mechanisms. Thereafter, the sealed bag is preferably repeatedly struck or pounded by the user's palm, fist, or other blunt object, to forcefully drive the plurality of tenderizing teeth into the meat, and thus tenderize same. Additionally, marinades may be 10 selectively introduced into the bag to infuse the meat with same during the tenderizing process, or to simply marinate and flavor the meat without assistance from the tenderizing teeth.

15 As such, utilization of the present invention effectuates an enclosed, sanitary, and overall more effective tenderizing and marinating process in view of conventional prior art apparatuses and methods. Additionally, preferably owing to the pliable nature of the 20 bag, the bag may be reversed or turned inside-out, thereby facilitating the effective cleaning and disinfecting of the bag's interior toothed surface via suitable cleansers or disinfectants, such as chlorine bleach, or the like.

Accordingly, a feature and advantage of the present invention is its ability to effectively tenderize meat within an enclosed structure.

5 Another feature and advantage of the present invention is its ability to effectively marinate meat within an enclosed structure.

Still another feature and advantage of the present
10 invention is its ability to effectively tenderize meat within an enclosed structure, thus permitting the sequestration and containment of raw meat juices, meat particulate, and/or marinade therewithin during the tenderizing process, thereby eliminating leakage and/or
15 splatter of same, and reducing or eliminating associated bacterial proliferation and contamination of surrounding surfaces or food items.

Yet another feature and advantage of the present
20 invention is its ability to effectively marinate meat within an enclosed structure, thus permitting the sequestration and containment of raw meat juices, meat particulate, and/or marinade therewithin during the

marinating process, thereby eliminating leakage and/or splatter of same, and reducing or eliminating associated bacterial proliferation and contamination of surrounding surfaces or food items.

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Yet still another feature and advantage of the present invention is its ability to permit the selective or contemporaneous tenderization and/or marination of meats or other desired food items.

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A further feature and advantage of the present invention is its ability to be reversed or turned inside-out, thereby facilitating the effective cleaning and disinfecting of the bag's toothed surfaces via suitable
15 cleansers or disinfectants, such as chlorine bleach, or the like.

Still a further feature and advantage of the present invention is its ability to be sealed.

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These and other features and advantages of the present invention will become more apparent to one skilled in the

art from the following description and claims when read in light of the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

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The present invention will be better understood by reading the Detailed Description of the Preferred and Alternate Embodiments with reference to the accompanying drawing figures, in which like reference numerals denote similar structure and refer to like elements throughout, and in which:

FIG. 1 is a perspective view of an apparatus for preparing food according to a preferred embodiment of the present invention;

FIG. 2 is a cross-sectional view of an apparatus for preparing food according to a preferred embodiment of the present invention;

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FIG. 3 is a cross-sectional view of an apparatus for preparing food according to an alternate embodiment of the present invention;

FIG. 4 is a cross-sectional view of an apparatus for preparing food according to an alternate embodiment of the present invention;

5 **FIG. 5** is a perspective view of an apparatus for preparing food according to an alternate embodiment of the present invention;

FIG. 6 is a perspective view of an apparatus for
10 preparing food according to an alternate embodiment of the present invention; and,

FIG. 7 is a perspective view of an apparatus for preparing food according to an alternate embodiment of the
15 present invention.

DETAILED DESCRIPTION OF THE PREFERRED

AND ALTERNATIVE EMBODIMENTS

20 In describing the preferred and alternate embodiments of the present invention, as illustrated in **FIGS. 1-7**, specific terminology is employed for the sake of clarity. The invention, however, is not intended to be limited to

the specific terminology so selected, and it is to be understood that each specific element includes all technical equivalents that operate in a similar manner to accomplish similar functions.

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Referring now to **FIGS. 1-2**, the present invention in a preferred embodiment is an apparatus **10** for selectively or contemporaneously tenderizing and/or marinating meats or other desired food items, wherein apparatus **10** is
10 preferably a substantially rectangular-shaped bag **20** comprising a plurality of pointed protrusions or tenderizing teeth **40** integrally formed with the interior surfaces thereof.

15 More specifically, bag **20** is preferably formed from a pliable, durable, non-porous plastic or rubber material that permits or facilitates reversibility or inversion of same for cleansing or sanitizing the interior surfaces thereof, thus promoting the reusability of bag **20** as more
20 fully described below. Bag **20** preferably comprises upper wall **22** and lower wall **24**, preferably hermitically sealed to one another along sides **26**, **28** and **30**, generally, of bag **20**, thus yielding aperture or mouth **32** for introducing meat

M or other food items into bag 20. Although sides 26, 28 and 30 of bag 20 are preferably hermitically sealed, it is contemplated in an alternate embodiment that other suitable methods and/or mechanisms of sealing sides 26, 28 and 30 of
5 bag 20 could be utilized, such as, for exemplary purposes only, stitching, riveting, hot melt, permanent adhesives and/or integral formation.

Preferably, mouth 32 of bag 20 comprises closure or
10 sealing mechanism 34 disposed proximal peripheral edge 33 of mouth 32, wherein sealing mechanism 34 is preferably in the form of a rib-and-groove mechanism; although other suitable mechanisms could be utilized, such as, for exemplary purposes only, ties, snap mechanisms, hook-and-
15 loop fasteners, zippers, grommet-and-tie assemblies, rib-and-groove mechanisms incorporating slide bars to facilitate cooperative engagement of the rib-and-groove mechanism, and/or other suitable repeatably resealable mechanisms. It is further contemplated that upper wall 22
20 or lower wall 24 could incorporate a sealable closure flap extending from peripheral edge 33 of mouth 32 to facilitate the sealing or closure of mouth 32.

It should be recognized that sealed sides **26**, **28** and **30** of bag **20**, in conjunction with mouth **32** sealed via sealing mechanism **34**, functionally provide for the sequestration and containment of raw meat juices, meat particulate, and/or marinade within bag **20**, thereby eliminating leakage and/or splatter of same upon implementation of the preferred tenderization method more fully described below. Additionally, such a configuration further precludes the proliferation of meat-borne bacteria and/or the contamination of surrounding surfaces and food items by same.

Inner surfaces **22A** and **24A** of upper wall **22** and lower wall **24**, respectively, preferably comprise integrally formed tenderizing teeth **40** extending therefrom. Tenderizing teeth **40** are preferably substantially "blunted" pyramidal-shaped, as is known with the art, yet possess a sufficient angular dimension to effectively pierce the meat **M** or other food item placed within bag **20**, as more fully described below. Although tenderizing teeth **40** are preferably substantially "blunted" pyramidal-shaped, it is contemplated in an alternate embodiment that tenderizing teeth **40** could possess other suitable configurations or

shapes, such as, for exemplary purposes only, spikes of any selected angular dimension, rounded or dulled protuberances, tenderizing teeth of varying or alternating size, height, thickness, angular dimension or dispersion.

5 Additionally, although tenderizing teeth **40** are disposed over the entirety of inner surfaces **22A** and **24A** of bag **20**, it is contemplated in an alternate embodiment that tenderizing teeth **40** could be at least partially disposed on inner surfaces **22A** and **24A** in any selected

10 concentration, dispersion, pattern or grouping, and/or disposed entirely or partially on at least one of inner surfaces **22A** and **24A**, as best illustrated in **FIG. 3**.

Implementation of the present method simply requires

15 that meat **M** or other food item be placed within bag **20**, excess air forced out therefrom via hand-pressure or the like if required, and the subsequent closure or sealing of bag **20** via sealing mechanism **34**. Thereafter, sealed bag **20** is preferably repeatedly struck or pounded by the user's

20 palm, fist, or other blunt object, to forcefully drive the plurality of tenderizing teeth **40** into meat **M**, and thus tenderize same. Additionally, marinades may be selectively introduced into bag **20** to infuse meat **M** with same during

the tenderizing process, or to simply marinade and flavor meat **M** without assistance from tenderizing teeth **40**.

As such, utilization of the present invention
5 effectuates an enclosed, sanitary, and overall more effective tenderizing and marinating process in view of conventional prior art apparatuses and methods. Additionally, preferably owing to the pliable nature of bag **20**, bag **20** may be reversed or turned inside-out, thereby
10 facilitating the effective cleaning and disinfecting of inner surfaces **22A** and **24A** of bag **20**, and tenderizing teeth **40**, via suitable cleansers or disinfectants, such as chlorine bleach, or the like.

15 Referring now more specifically to **FIG. 4**, illustrated therein is an alternate embodiment of bag **20**, wherein the alternate embodiment of **FIG. 4** is substantially equivalent in form and function to that of the preferred embodiment detailed and illustrated in **FIGS. 1-2** except as hereinafter
20 specifically referenced. Specifically, the embodiment of **FIG. 4** replaces the flat, singled seamed sides **26**, **28** and **30** of bag **20** with expandable, pleated or accordion-like sides **126**, **128** and **130**, respectively, to facilitate

incremental expansion of the overall volumetric capacity of bag 20, thereby permitting the placement therein of larger cuts of meat or other food items for tenderization of same.

5 Referring now more specifically to **FIG. 5**, illustrated therein is an alternate embodiment of bag 20, wherein the alternate embodiment of **FIG. 5** is substantially equivalent in form and function to that of the preferred embodiment detailed and illustrated in **FIGS. 1-2** except as hereinafter
10 specifically referenced. Specifically, the embodiment of **FIG. 5** replaces the flat, singled-seamed sides 26, 28 and 30 of bag 20 with repeatably resealable sides 226, 228, 230 in the form of a slide bar or zippered rib-and-groove mechanism; although other suitable repeatably resealable
15 mechanisms could be utilized. Such a configuration facilitates the general opening of bag 20 and thus, the access, placement, centering and/or positioning of meat M or other food items therewithin, and/or the removal of same therefrom. It is further contemplated that any selected
20 number of sides of bag 20 could incorporate repeatably resealable mechanisms.

Referring now more specifically to **FIG. 6**, illustrated therein is an alternate embodiment of bag **20**, wherein the alternate embodiment of **FIG. 6** is substantially equivalent in form and function to that of the preferred embodiment detailed and illustrated in **FIGS. 1-2** except as hereinafter specifically referenced. Specifically, the embodiment of **FIG. 6** replaces integrally formed tenderizing teeth **40** with removable or interchangeable tenderizing plates **140**, wherein tenderizing plates **140** could incorporate any suitable form of tenderizing surface, such as, for exemplary purposes only, tenderizing teeth entirely, or at least partially, disposed thereon in any selected concentration, dispersion, pattern or grouping, and/or disposed entirely or partially on at least one of the tenderizing plates **140**. Additionally, at least one of tenderizing plates **140** could possess a substantially flat, hard surface, intended to provide a juxtaposed, meat-supporting surface against which meat can be struck. Furthermore, it is contemplated that a plurality of such tenderizing plates **140** could be placed within bag **20**, wherein different meats or food items could be interspersed therebetween for tenderizing and/or marinating same in accord with the present inventive method.

Referring now more specifically to **FIG. 7**,
illustrated therein is an alternate embodiment of bag **20**,
wherein the alternate embodiment of **FIG. 7** is substantially
equivalent in form and function to that of the preferred
5 embodiment detailed and illustrated in **FIGS. 1-2** except as
hereinafter specifically referenced. Specifically, the
embodiment of **FIG. 7** incorporates a stoppered drainage
spout **400** to facilitate the tidy drainage and disposal of
marinades, meat juices and/or meat particulate from bag **20**.

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It is contemplated in another alternate embodiment
that bag **20** could be dishwasher-safe.

It is contemplated in another alternate embodiment
15 that bag **20** could incorporate an automated air expeller or
vacuum pump/sealer to facilitate vacuum sealing of bag **10**.
In such an embodiment, it is contemplated that the vacuum
sealer could be connected to drainage spout **400** to draw air
from bag **20**.

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It is contemplated in still another alternate
embodiment that bag **20** could be manufactured to any size
and/or shape.

It is contemplated in yet another alternate embodiment that bag 20 could be manufactured to be disposable after a first or select number of uses.

5 Having thus described exemplary embodiments of the present invention, it should be noted by those skilled in the art that the within disclosures are exemplary only, and that various other alternatives, adaptations, and modifications may be made within the scope of the present
10 invention. Accordingly, the present invention is not limited to the specific embodiments illustrated herein, but is limited only by the following claims.

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